

ISA Calgary Show 2019

Focus Area of Proposed Presentation

Process Measurements

Title of Presentation

Innovative chemical and odor control monitoring systems in natural gas and gaseous fuels.

Summary of Presentation

Chromatotec Group® is specialized in the manufacturing of process gas analyzers based in automatic Gas Chromatography (autoGCs) for online monitoring. The solutions provided allow tracking individually very low concentration levels (from ppt to ppb) as well as concentration levels from ppm to %.

In parallel of its standard solutions for ambient, odor and process application, Chromatotec® is permanently involved in new turn-key solution developments for gas analysis at industrial sites. In response to the demands of the oil and gas industry, two new solutions will be presented:

In a first place, a new chemical and odor control monitoring system "Chroma THC", in a complete wall-mounted box for the VOCs monitoring with the Total Hydro Carbons (THC) quantification as well as Methane (CH₄). Direct measurement is provided in few minutes. Solution includes automatic internal calibration and gas generators to avoid the gas cylinders use on site offering reliable and fully automated standalone unit. With 3G/4G MODEM used for data transmission, automatic alarms message transmitted by SMS are sent when process drift may be observed. End user and process provider are informed that media support must be replaced (e.g. charcoal filter when saturated) offering optimized process.

Secondly, a simplified enhanced sampling system designed to extract representative samples from the liquid phase. The extracted liquid sample is then vaporized and injected automatically and in continuous mode into the column of the Sulfur or VOCs auto-GC analyzer with speciation of more than 16 Sulfurs and 123 VOCs according to configuration type. Considering Sulfurs approach, odorants (Mercaptans, THT and DMS) and other sulfur species can be analyzed in Liquid Propane Gas (LPG), Liquified Natural Gas (LNG) and other liquid samples such as crude oil, diesel, fuel, oil, water and condensates without any human intervention for preparation.

These products are compliant with ATEX, CSA and more recently IECEx type certifications for large deployment on refineries and petrochemical plants where hazardous area certification is requested. Pressurized configuration (Exp) or flameproof (Exd) enclosures are also available to face to any environment type.

Short, Professional Biography of Presenter

Louis Vivola is the Sales Director at Chromatotec, a French international company that manufactures automatic gas chromatographs for ambient air, oil and gas and process monitoring.

Before joining Chromatotec, Mr. Vivola specialized in analytical instrumentation. He developed his experience on analytical solutions and deployment of lab analytical solutions on field with companies and institutions as reputable as Commissariat Energie Atomique (CEA) or Gaz de France.

After a successful career in charge a Business Unit for Environment in the field of odor measurement (e-nose, dispersion studies, sensory evaluation and audits, portable olfactometers introduction in France), Mr. Vivola is now focused on the Oil and Gas market. He manages numerous projects of odorization process and control with gas companies worldwide, including USA (biggest network of MEDOR analyzers), Middle East, Japan and Europe.

You can reach Louis at louis.vivola@chromatotec.com.

Photo of Presenter